

**Commonwealth of Kentucky  
Environmental and Public Protection Cabinet  
Department for Environmental Protection  
Division for Air Quality  
803 Schenkel Lane  
Frankfort, Kentucky 40601  
(502) 573-3382**

**AIR QUALITY PERMIT  
Issued under 401 KAR 52:040**

**Permittee Name:** Dana Corporation – Perfect Circle Division

**Mailing Address:** 721 Blackjack Road  
Franklin, KY 42135

**Source Name:** Same as above  
**Mailing Address:** Same as above  
**Source Location:** Same as above

**Source ID#:** 21-213-00009  
**SIC Code:** 3592

**Regional Office:** Bowling Green Office  
1508 Western Avenue  
Bowling Green, KY 42104-3356  
(270) 746-7475

**County:** Simpson

**Permit #:** S-04-034  
**Log #:** 55748  
**Permit Type:** Minor Source Construction/Operating

**Application**  
**Complete Date:** July 12, 2003  
**Issuance Date:** October 26, 2004  
**Expiration Date:** October 26, 2014

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**John S. Lyons, Director  
Division for Air Quality**

## **SECTION A – PERMIT AUTHORIZATION**

Pursuant to a duly submitted application the Kentucky Division for Air Quality hereby authorizes the operation of the equipment described herein in accordance with the terms and conditions of this permit. This permit has been issued under the provisions of Kentucky Revised Statutes Chapter 224 and regulations promulgated pursuant thereto.

The permittee shall not construct, reconstruct, or modify any affected facilities without first having submitted a complete application and received a permit for the planned activity from the permitting authority, except as provided in this permit or in 401 KAR 52:040, State-origin permits.

Issuance of this permit does not relieve the permittee from the responsibility of obtaining any other permits, licenses, or approvals required by this Cabinet or any other federal, state, or local agency.

**Definitions:** The following definitions apply to all abbreviations and variables used in this permit:

PT – total particulate matter  
PM10 – particulate matter equal to or smaller than 10 micrometers  
CO – carbon monoxide  
NO<sub>x</sub> – nitrogen oxides  
SO<sub>2</sub> – sulfur dioxide  
Pb – lead  
VOC – volatile organic compounds

**SECTION B – AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS****GROUP REQUIREMENTS: Existing Machining Groups**

**Description:** At the facility, each control system services several pieces of machining equipment. Individual pieces of machining equipment have been organized into groups based on their shared control system as shown in the table below. Each of the groups listed below is subject to regulations under 401 KAR 61:020.

<b>ID</b>	<b>Individual Sources</b>	<b>Control System</b>	<b>Construction Date</b>
01	Baghouse Dust from units 2, 2a, 3, 4, 5, 6 542 Cam Turn and Mill 543 Cam Turns New Process Cam Turn & Mill Vent Mills (2) Hook Lap Mills (3) Double Rough Mill Finish Mill Scotch Brite	Sly	May 3, 1972
02	Rough PC Bore Single Seal Kataoka Machine Brite Finish Turn Finish Bore Rough Bore Auto Gang Turn & Bore Auto Finish Turn	Carter Day	September 1, 1972
03	Auto Finish Turn	Carter Day	September 1, 1972
05	Kataoka Machine Rough Graham Bore Rough Bore Auto Gang Turn & Bore Auto Finish Turn	Carter Day	March 3, 1975

**APPLICABLE REGULATIONS:**

**401 KAR 61:020** Existing process operations

1. **Operating Limitations:** None

2. **Emission Limitations:**

- a. ***Opacity Standard:*** Visible emissions from each stack or vent associated with the groups listed above that emits outside the building shall not equal or exceed 40% opacity. [401 KAR 61:020 §(3)(1)]

**SECTION B – AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS**

**Compliance Demonstration:** The permittee shall demonstrate compliance through monitoring and maintenance of the records as specified in points **4. Specific Monitoring Requirements** and **5. Specific Record Keeping Requirements** below.

- b. **Mass Emission Standard:** Particulate emissions from each stack or vent associated with the groups listed above that emits outside the building shall not exceed the following limits:
- For groups with a combined process rates  $< 0.5$  tons/hour:
$$E'_{PM} = 2.34 \text{ (lb/hr)}$$
  - For groups with a combined process rates  $> 0.5$  tons/hour:
$$E'_{PM} = 4.10 \cdot P^{0.67} \text{ (lb/hr)}$$

Where  $E'_{PM}$  is the allowable particulate emission rate (pounds/hour) and  $P$  is the maximum combined process rate (tons/hour).

**Compliance demonstration:** Compliance with the limits described above shall be determined by comparing the allowable rate to the actual rate as calculated below:

$$E_{PM} = 0.597 \cdot \frac{P}{h}$$

For each subgroup listed above,  $E_{PM}$  is the actual average hourly particulate emission rate (pounds/hour),  $P$  is the total combined material processed (tons/month) and  $h_i$  is the actual total hours of operation (hours/month).

**3. Testing Requirements:** None

**4. Specific Monitoring Requirements:**

- For each group listed above, the permittee shall monitor:
  - Total monthly hours of operation (hours/month).
  - Total monthly material processed (tons/month).
- For each stack that emits outside the building, the permittee shall perform monthly observations of visible emissions where:
  - If no visible emissions are observed then no further monitoring is required.
  - If visible emissions are observed, the permittee shall perform a Method 9 reading.

**5. Specific Recordkeeping Requirements:**

- For each group listed above, the permittee shall maintain records of:

**SECTION B – AFFECTED FACILITIES, APPLICABLE REGULATIONS,  
AND OPERATING CONDITIONS**

- i. Total monthly hours of operation (hours/month).
    - ii. Total monthly material processed (tons/month).
  - b. For each stack that emits outside the building, the permittee maintain a log of the monthly visible emission observations. The log shall note:
    - i. Whether any emissions were observed.
    - ii. Whether the emissions observed were normal for the process.
    - iii. The results of any Method 9 readings if any visible emissions are seen.
    - iv. The cause of the abnormal visible emissions.
    - v. Any corrective actions taken.
6. **Specific Reporting Requirements:** None
7. **Specific Control Equipment Operating Conditions:** The permittee shall install, properly maintain, and operate the control equipment in accordance with manufacturer's guidelines.
8. **Compliance Certification Requirements:** See SECTION C.6. below.

## SECTION B – AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS

### GROUP REQUIREMENTS: New Machining Groups

**Description:** At the facility, each control system services several pieces of machining equipment. Individual pieces of machining equipment have been organized into groups based on their shared control system as shown in the table below. Each of the groups listed below is subject to regulations under 401 KAR 59:010.

ID	Subgroup Sources	Control Equipment	Construction Date
04	Kataoka Machine Auto Gang Turn & Bore Auto Finish Turn	Carter Day Collection System	December 20, 1976
06	Auto Gang Turn & Bore Rough Bore Auto Finish Turn (2)	Carter Day Collection System	November 12, 1980

### APPLICABLE REGULATIONS:

**401 KAR 59:010** New process operations

1. **Operating Limitations:** None

2. **Emission Limitations:**

- a. ***Opacity Standard:*** Visible emissions from each stack or vent associated with the groups listed above that emits outside the building shall not equal or exceed 20% opacity. [401 KAR 61:020 §(3)(1)]

**Compliance Demonstration:** The permittee shall demonstrate compliance through monitoring and maintenance of the records as specified in points 4.

**Specific Monitoring Requirements** and 5. **Specific Record Keeping Requirements** below.

- b. ***Mass Emission Standard:*** Particulate emissions from each stack or vent associated with the groups listed above that emits outside the building shall not exceed the following limits:

- i. For groups with a combined process rates < 0.5 tons/hour:

$$E'_{PM} = 2.34 \text{ (lb/hr)}$$

- ii. For groups with a combined process rates > 0.5 tons/hour:

$$E'_{PM} = 3.59 \cdot P^{0.62} \text{ (lb/hr)}$$

Where  $E'_{PM}$  is the allowable particulate emission rate (pounds/hour) and P is the maximum combined process rate (tons/hour).

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**Compliance demonstration:** Compliance with the limits described above shall be determined by comparing the allowable rate to the actual rate as calculated below:

$$E_{PM} = 0.597 \cdot \frac{P}{h}$$

For each subgroup listed above,  $E_{PM}$  is the actual average hourly particulate emission rate (pounds/hour),  $P$  is the total combined material processed (tons/month) and  $h_i$  is the actual total hours of operation (hours/month).

3. **Testing Requirements:** None

4. **Specific Monitoring Requirements:**

- a. For each group listed above, the permittee shall monitor:
  - i. Total monthly hours of operation (hours/month).
  - ii. Total monthly material processed (tons/month).
- b. For each stack that emits outside the building, the permittee shall perform monthly observations of visible emissions where:
  - i. If no visible emissions are observed then no further monitoring is required.
  - ii. If visible emissions are observed, the permittee shall perform a Method 9 reading.

5. **Specific Recordkeeping Requirements:**

- a. For each group listed above, the permittee shall maintain records of:
  - i. Total monthly hours of operation (hours/month).
  - ii. Total monthly material processed (tons/month).
- b. For each stack that emits outside the building, the permittee maintain a log of the monthly visible emission observations. The log shall note:
  - i. Whether any emissions were observed.
  - ii. Whether the emissions observed were normal for the process.
  - iii. The results of any Method 9 readings if any visible emissions are seen.
  - iv. The cause of the abnormal visible emissions.
  - v. Any corrective actions taken.

6. **Specific Reporting Requirements:** None

**SECTION B – AFFECTED FACILITIES, APPLICABLE REGULATIONS,  
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7. **Specific Control Equipment Operating Conditions:** The permittee shall install, properly maintain, and operate the control equipment in accordance with manufacturer's guidelines.
8. **Compliance Certification Requirements:** See SECTION C.6. below.



**SECTION C – INSIGNIFICANT ACTIVITIES**

The following listed activities have been determined to be insignificant activities for this source pursuant to 401 KAR 52:040, Section 6. While these activities are designated as insignificant the permittee shall comply with the applicable regulation and any level of periodic monitoring specified below.

Description	Generally Applicable Regulation
1. Boilers	401 KAR 59:015
2. Welding	401 KAR 59:010
3. Hot Water Degreasers (2)	401 KAR 59:010
4. Rust Stripping Line	401 KAR 61:020
5. Granoseal Plating Line	401 KAR 61:020
6. Tin Plating Line	401 KAR 59:010
7. Seal Plating Line	401 KAR 59:010

## SECTION C – GENERAL CONDITIONS

### 1. Administrative Requirements

- a. The permittee shall comply with all conditions of this permit. Noncompliance shall be a violation of 401 KAR 52:040, Section 3(1)(b) and is grounds for enforcement action including but not limited to the termination, revocation and re-issuance, or revision of this permit.
- b. This permit shall remain in effect for a fixed term of ten (10) years following the original date of issue. Permit expiration shall terminate the source's right to operate unless a timely and complete renewal application has been submitted to the Division at least six months prior to the expiration date of the permit. Upon a timely and complete submittal, the authorization to operate within the terms and conditions of this permit, including any permit shield, shall remain in effect beyond the expiration date, until the renewal permit is issued or denied by the Division [401 KAR 52:040, Section 15].
- c. Any condition or portion of this permit that becomes suspended or is ruled invalid as a result of any legal or other action shall not invalidate any other portion or condition of this permit [*Cabinet Provisions and Procedures for Issuing State-Origin Permits*, Section 1a(11), incorporated by reference in 401 KAR 52:040, Section 23(1)].
- d. Pursuant to materials incorporated by reference by 401 KAR 52:040, this permit may be revised, revoked, reopened, reissued, or terminated for cause. The filing of a request by the permittee for any permit revision, revocation, re-issuance, or termination, or of a notification of a planned change or anticipated noncompliance shall not stay any permit condition [*Cabinet Provisions and Procedures for Issuing State-Origin Permits*, Section 1a(4,5), incorporated by reference in 401 KAR 52:040, Section 23(1)].
- e. This permit does not convey property rights or exclusive privileges [*Cabinet Provisions and Procedures for Issuing State-Origin Permits*, Section 1a(8), incorporated by reference in 401 KAR 52:040, Section 23(1)].
- f. Nothing in this permit shall alter or affect the liability of the permittee for any violation of applicable requirements prior to or at the time of permit issuance [401 KAR 52:040 Section 11(3)].
- g. All previously issued permit to this source at this location are hereby null and void.

### 2. Recordkeeping Requirements

- a. Records of all required monitoring data and support information, including calibrations, maintenance records, and original strip chart recordings, and copies of all reports required by the Division for Air Quality, shall be retained by the permittee for a period of at least five years and shall be made available for inspection upon

## SECTION C – GENERAL CONDITIONS

request by any duly authorized representative of the Division for Air Quality [401 KAR 52:040 Section 3(1)(f)].

- b. The permittee shall perform compliance certification and recordkeeping sufficient to assure compliance with the terms and conditions of the permit. Documents, including reports, shall be certified by a responsible official pursuant to 401 KAR 52:040, Section 21.

### 3. Reporting Requirements

- a. In accordance with the provisions of 401 KAR 50:055, Section 1, the permittee shall notify the Regional Office listed on the front of this permit concerning startups, shutdowns, or malfunctions as follows:
  - i. When emissions during any planned shutdowns and ensuing startups will exceed the standards notification shall be made no later than three (3) days before the planned shutdown, or immediately following the decision to shut down, if the shutdown is due to events which could not have been foreseen three (3) days before the shutdown.
  - ii. When emissions due to malfunctions, unplanned shutdowns and ensuing startups are or may be in excess of the standards notification shall be made as promptly as possible by telephone (or other electronic media) and shall submit written notice upon request.
- b. The permittee shall promptly report deviations from permit requirements including those attributed to upset conditions (other than emission exceedances covered by Reporting Requirement condition 1a above), the probable cause of the deviation, and corrective or preventive measures taken; to the Regional Office listed on the front of this permit within 30 days. Other deviations from permit requirements shall be included in the semiannual [*Cabinet Provisions and Procedures for Issuing State-Origin Permits*, Section 1b(V)(3), incorporated by reference in 401 KAR 52:040, Section 23(1)].
- c. Summary reports of monitoring required by this permit shall be submitted to the Regional Office listed on the front of this permit at least every six (6) months during the life of this permit. For emission units that were still under construction or which had not commenced operation at the end of the 6-month period covered by the report and are subject to monitoring requirements in this permit, the report shall indicate that no monitoring was performed during the previous six months because the emission unit was not in operation.
- d. The summary reports are due January 30th and July 30th of each year. All deviations from permit requirements shall be clearly identified in the reports. All reports shall be certified by a responsible official pursuant to 401 KAR 52:040, Section 21.

**SECTION C – GENERAL CONDITIONS****4. Inspections**

In accordance with the requirements of 401 KAR 52:040, Section 3(1)(f) the permittee shall allow authorized representatives of the Cabinet to perform the following during reasonable times:

- a. Enter upon the premises to inspect any facility, equipment (including air pollution control equipment), practice, or operation;
- b. To access and copy any records required by the permit;
- c. Inspect, at reasonable times, any facilities, equipment (including monitoring and pollution control equipment), practices, or operations required by the permit. Reasonable times are defined as during all hours of operation, during normal office hours; or during an emergency;
- d. Sample or monitor, at reasonable times, substances or parameters to assure compliance with the permit or any applicable requirements.

**5. Emergencies/Enforcement Provisions**

- a. The permittee shall not use as defense in an enforcement action, the contention that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance [*Cabinet Provisions and Procedures for Issuing State-Origin Permits*, Section 1a(3), incorporated by reference in 401 KAR 52:040, Section 23(1)].
- b. An emergency shall constitute an affirmative defense to an action brought for the noncompliance with the technology-based emission limitations if the permittee demonstrates through properly signed contemporaneous operating logs or relevant evidence that:
  - i. An emergency occurred and the permittee can identify the cause of the emergency;
  - ii. The permitted facility was at the time being properly operated;
  - iii. During an emergency, the permittee took all reasonable steps to minimize levels of emissions that exceeded the emissions standards or other requirements in the permit; and
  - iv. The permittee notified the Division as promptly as possible and submitted written notice of the emergency to the Division within two working days after the time when emission limitations were exceeded due to the emergency and included a description of the emergency, steps taken to mitigate emissions, and corrective actions taken.
- c. Emergency provisions listed in General Condition 5b are in addition to any emergency or upset provision contained in an applicable requirement [401 KAR 52:040, Section 22(1)].
- d. In an enforcement proceeding, the permittee seeking to establish the occurrence of an emergency shall have the burden of proof. [401 KAR 52:040, Section 22(2)].

**SECTION C – GENERAL CONDITIONS****6. Compliance**

- a. Periodic testing or instrumental or non-instrumental monitoring, which may consist of record keeping, shall be performed to the extent necessary to yield reliable data for purposes of demonstration of continuing compliance with the conditions of this permit. For the purpose of demonstration of continuing compliance, the following guidelines shall be followed:
  - i. Pursuant to 401 KAR 50:055, General compliance requirements, Section 2(5), all air pollution control equipment and all pollution control measures proposed by the application in response to which this permit is issued shall be in place, properly maintained, and in operation at any time an affected facility for which the equipment and measures are designed is operated, except as provided by 401 KAR 50:055, Section 1;
  - ii. All the air pollution control systems shall be maintained regularly in accordance with good engineering practices and the recommendations of the respective manufacturers. A log shall be kept of all routine and non routine maintenance performed on each control device;
- b. Pursuant to 401 KAR 52:040, Section 19, the permittee shall certify compliance with the terms and conditions contained in this permit by January 30th of each year, by completing and returning a Compliance Certification Form (DEP 7007CC) (or an approved alternative) to the Regional Office listed on the front of this permit in accordance with the following requirements:
  - i. Identification of the term or condition;
  - ii. Compliance status of each term or condition of the permit;
  - iii. Whether compliance was continuous or intermittent;
  - iv. The method used for determining the compliance status for the source, currently and over the reporting period, and
  - v. For an emissions unit that was still under construction or which has not commenced operation at the end of the 12-month period covered by the annual compliance certification, the permittee shall indicate that the unit is under construction and that compliance with any applicable requirements will be demonstrated within the timeframes specified in the permit.
  - vi. The certification shall be postmarked by January 30th of each year. Annual compliance certifications should be mailed to the following addresses:

Division for Air Quality  
Bowling Green Regional Office  
1508 Western Avenue  
Bowling Green, KY 42104-3356

Division for Air Quality  
Central Files  
803 Schenkel Lane  
Frankfort, KY 40601-1403

- c. Permit Shield - A permit shield shall not protect the owner or operator from enforcement actions for violating an applicable requirement prior to or at the time of permit issuance. Compliance with the conditions of this permit shall be considered compliance with all:

**SECTION C – GENERAL CONDITIONS**

- i. Applicable requirements that are included and specifically identified in this permit; or
- ii. Non-applicable requirements expressly identified in this permit [401 KAR 52:040, Section 11].